

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-54 (Cancelled)

55. (Currently Amended) A wafer processing apparatus comprising:

a plurality of metal deposition chambers, the metal deposition chambers to deposit metal layers on wafers;

an annealing chamber, the annealing chamber integrated with the wafer processing apparatus, the annealing chamber to anneal the metal layers to stabilize hardness of the metal layers prior to chemical mechanical polishing;

~~a robot configured to move~~ robot means for moving the wafers having the metal layers deposited thereon from the metal deposition chambers directly to the annealing chamber shortly after the metal layers have been deposited on the wafers,

wherein the wafer processing apparatus does not have a polishing chamber.

56. (Previously Presented) The wafer processing apparatus of claim 55, wherein the plurality of metal deposition chambers are chemical vapor deposition chambers.

57. (Currently Amended) The wafer processing apparatus of claim 56, wherein the wafer processing apparatus consists essentially of the plurality of chemical vapor deposition chambers, the annealing chamber, and the robot means.

58. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber is attached to the side of the wafer processing apparatus.
59. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber is provided adjacent to the wafer processing apparatus and the chemical vapor deposition chambers.
60. (Previously Presented) The wafer processing apparatus of claim 56, wherein the chemical vapor deposition chambers comprises a copper deposition chamber.
61. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber comprises a furnace.
62. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber comprises a heat lamp.
63. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber comprises a hot stage.
64. (Previously Presented) The wafer processing apparatus of claim 56, wherein the annealing chamber is to heat the metal layer to a temperature of about 200 degrees Celsius.
65. (Cancelled)
66. (Previously Presented) The wafer processing apparatus of claim 56, wherein the wafer processing apparatus comprises three chemical vapor deposition chambers.
67. (Currently Amended) A wafer processing apparatus comprising:
- an annealing chamber, the annealing chamber integrated with the wafer processing apparatus, the annealing chamber to anneal wafers having metal layers thereon to stabilize hardness of the metal layers prior to chemical mechanical polishing;

one or more chemical mechanical polishing platforms, the one or more chemical mechanical polishing platforms integrated with the wafer processing apparatus, the one or more chemical mechanical polishing platforms to polish the wafers including the metal layers;

~~a robot configured to move~~ robot means for moving the wafers having the metal layers deposited thereon from the annealing chamber directly to the one or more chemical mechanical polishing platforms,

wherein the wafer processing apparatus does not have a metal deposition chamber.

68. (Cancelled)

69. (Currently Amended) The wafer processing apparatus of claim 67, wherein the wafer processing apparatus consists ~~essentially~~ of the annealing chamber, the one or more chemical mechanical polishing platforms, and the robot means.

70. (Previously Presented) The wafer processing apparatus of claim 67, wherein the annealing chamber is attached to the side of the wafer processing apparatus.

71. (Previously Presented) The wafer processing apparatus of claim 67, wherein the annealing chamber is provided adjacent to the wafer processing apparatus and one or more chemical mechanical polishing platforms.

72. (Previously Presented) The wafer processing apparatus of claim 67, wherein the annealing chamber comprises one or more selected from a furnace, a heat lamp, and a hot stage.

73. (Previously Presented) The wafer processing apparatus of claim 67, wherein the annealing chamber is to heat the metal layer to a temperature of about 200 degrees Celsius.

74. (Cancelled)

75. (Previously Presented) The wafer processing apparatus of claim 67, wherein the wafer processing apparatus comprises three chemical mechanical polishing platforms.

76. (Currently Amended) A wafer processing apparatus comprising:

one or more chemical mechanical polishing platforms, the one or more chemical mechanical polishing platforms integrated with the wafer processing apparatus, the one or more chemical mechanical polishing platforms to polish wafers having metal layers thereon;

an annealing chamber, the annealing chamber integrated with the wafer processing apparatus, the annealing chamber to anneal the wafers having the metal layers thereon to stabilize hardness of the metal layers after the wafers have been polished;

~~a robot configured to move~~ a robot means for moving the wafers that have been polished from the one or more chemical mechanical polishing platforms directly to the annealing chamber.

77. (Cancelled)

78. (Currently Amended) The wafer processing apparatus of claim 76, wherein the wafer processing apparatus consists ~~essentially~~ of the annealing chamber, the one or more chemical mechanical polishing platforms, and the robot means.

79. (Previously Presented) The wafer processing apparatus of claim 76, wherein the annealing chamber is attached to the side of the wafer processing apparatus.

80. (Previously Presented) The wafer processing apparatus of claim 76, wherein the annealing chamber is provided adjacent to the wafer processing apparatus and one or more chemical mechanical polishing platforms.